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INTRODUCTION

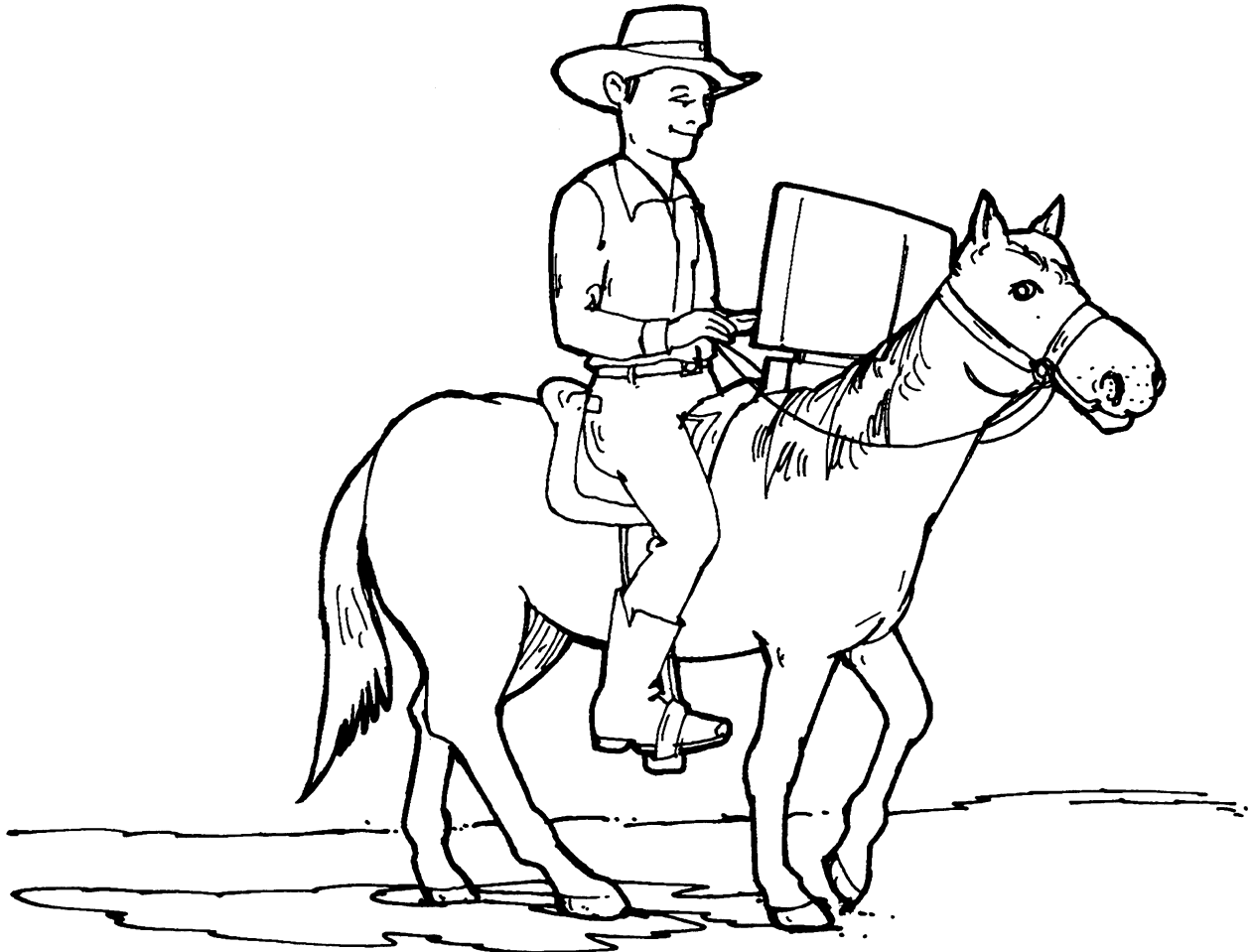
A NEW ERA IN EDUCATION

Welcome to a new era of education. In this era, the traditional walls of the classroom have been removed. Students are leaving the classroom aboard educational tools like CD-ROM, laserdiscs, multimedia, and telecommunications. They are creating projects in partnership with not only their peers in the classroom, but with people all over the world. Teachers have access to tools that allow them to reach and challenge students in ways they could only dream of before.

Like most change, the use of educational technology does not happen overnight. It requires a commitment to continuing education and, for some, a total shift in the way they think about delivering instruction. Although this sounds like a monumental task, the good news is that it can be very exciting and satisfying.

There is no way to duplicate all the different hardware and software configurations used in education. It does not make a difference whether your school has chosen IBM or Apple, Windows or Mac. What we are concerned with is how to match the tool to the job. In short, how can technology help us do our jobs better?

Consider how teaching can be enhanced with technology and how these tools can help you make your students better readers, writers, problem solvers, and thinkers.

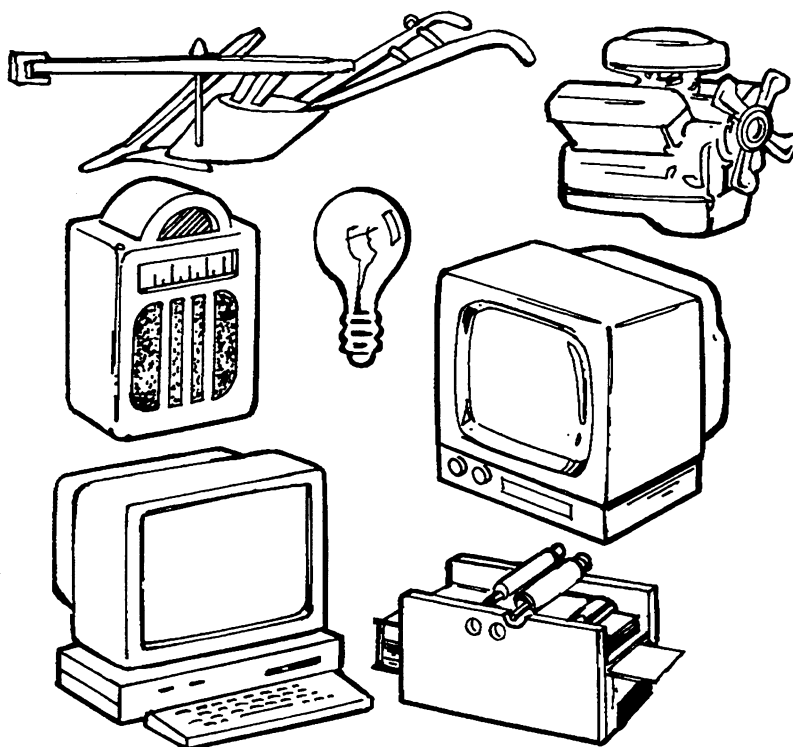


INTRODUCTION *(CONT.)*

WHAT IS TECHNOLOGY?

The definition of technology, like the examples we use to illustrate it, is ever-changing. Simply put, technology is a tool human beings use to complete a job more efficiently and/or creatively. Since the beginning of time we have striven to create tools that make our lives easier or allow us to push the window of creativity. In most cases, the effects of these inventions on our every day lives have been less than earth shaking. However, at certain times in our history, technology has been developed that changes how we think, feel, work, and live. Consider the effects of the following technologies on human beings:

- The Plow
- The Printing Press
- The Internal Combustion Engine
- The Electric Light
- The Radio
- The Television
- The Computer



Furthermore, consider the evolution of education in comparison to the invention of these technologies. The plow turned a world of mostly subsistence farmers into one that could produce excess food and feed many people. The result was the growth of cities, and from this, the need and time for wide spread public education. The rest of the list's contributions to the education system are more obvious, but no less profound. The computer is the latest invention to change the way we think about education. This technology has already changed our lives and will make profound changes in the way we educate ourselves and our children.

Computer technology has come a long way since IBM's first computer. The IBM Mark I had 760,000 parts, 500 miles of wire and required four seconds to perform a simple multiplication equation. The personal computers of today handle thousands of calculations per second and fit on a teacher's desk top, with plenty of room for books and coffee.

Modern personal computers can display colour pictures or video and digital audio can be played. Voice recognition by the computer is no longer a dream of the future; it is shipped as standard equipment on many models. Interactively, the ability to choose one's own path through an educational experience has aided people in finding the information they must have to make informed decisions.

INTRODUCTION (CONT.)

THE HISTORY OF EDUCATIONAL TECHNOLOGY

In order to evaluate attitudes about the educational technology of today, it is important to see the attitudes of people involved with new technologies in the past. Here are a few quotes from people involved in education during the time when new technologies were being introduced.

“Students today can’t prepare bark to calculate their problems. They depend on their slates which are more expensive. What will they do when the slate is dropped and it breaks? They will be unable to write!” (Teacher’s Conference, 1703)

“Students today depend on paper too much. They don’t know how to write on a slate without getting chalk dust all over themselves. They can’t clean a slate properly. What will they do when they run out of paper?” (Principal’s Association, 1815)

“Students today depend too much upon ink. They don’t know how to use a pen knife to sharpen a pencil. Pen and ink will never replace the pencil.” (National Association of Teachers, 1907)

“Students today depend upon store bought ink. They don’t know how to make their own. When they run out of ink they will be unable to write words or ciphers until their next trip to the settlement. This is a sad commentary on modern education.” (The Rural American Teacher, 1928)

“Students today depend on these expensive fountain pens. They can no longer write with a straight pen and nib. We parents must not allow them to wallow in such luxury to the detriment of learning how to cope in the real business world which is not so extravagant.” (PTA Gazette, 1941)

“Ballpoint pens will be the ruin of education in our country. Students use these devices and then throw them away. The values of thrift and frugality are being discarded. Business and banks will never allow such expensive luxuries.” (Federal Teachers, 1950)

“Students today depend too much on handheld calculators . . .”

Detractors from today’s vision of education will no doubt have the same view of the use of computers. What we must realise is that like bark, slate, pencils, pens, and calculators, computers are nothing but the vehicles we use to deliver instruction. It is not the paint or brush or canvas that makes a great painting, it is the artist’s product.

